CLAIMS

What is claimed is:

1. A method of building credentials for a user of a device

5 connected to a network, the method comprising the steps of:

providing a plurality of credential descriptors to a first credential builder included in a first device connected to the network;

attempting to build credentials corresponding to at

10 least one of the credential descriptors using the first credential builder;

providing at least one credential descriptor for which a corresponding credential was not built in the first building step to a second credential builder included in a

15 second device connected to the network; and

attempting to build credentials corresponding to at least one of the credential descriptors provided in the second providing step using the second credential builder.

20 2. The method of claim 1 further including the steps of

providing the credentials built using the first and second credential builders to a credential evaluator included in the first device or the second device; and

evaluating the built credentials using the credential

25 evaluator to determine whether the built credentials satisfy the plurality of credential descriptors for the device.

3. The method of claim 1 further including the steps of

providing the credentials built using the first and

30 second credential builders to a credential evaluator

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included in a device connected to the network that is
different from the first and second devices; and

     evaluating the built credentials using the credential
evaluator to determine whether the built credentials satisfy

5   the plurality of credential descriptors for the device.

4.   The method of claim 1 further including the steps of
     providing at least one credential descriptor for which
a corresponding credential was not built in the second

10   building step to the first credential builder; and
     attempting to build credentials corresponding thereto
using the first credential builder.

5.   The method of claim 1 further including the steps of

15   .   providing at least one credential descriptor for which
a corresponding credential was not built in either the first
or the second building step to a third credential builder
included in a device connected to the network that is
different from the first and second devices; and

20   attempting to build credentials corresponding thereto
using the third credential builder.

6.   The method of claim 1 further including the step of
generating the plurality of credential descriptors for the

25   device.

7.   A system used to build credentials for a user of a
device connected to a network, comprising:

a first credential builder operative to build credentials corresponding to at least one of a plurality of credential descriptors for the device; and

a second credential builder operative to build credentials corresponding to at least another one of the plurality of credential descriptors for the device,

wherein the first credential builder and the second credential builder are included in different devices connected to the network.

8. The system of claim 7 further including a master credential evaluator operative to evaluate credentials built by the first and second credential builders.

9. The system of claim 8 wherein the credential evaluator is included in the same device as the first credential builder or the second credential builder.

10. The system of claim 8 wherein the credential evaluator is included in a device different from the devices including the first and second credential builders.

11. A method of building credentials for a user of a device, the method comprising the steps of:

providing a plurality of credential descriptors to a master credential builder that includes a plurality of credential builders for building a corresponding plurality of different types of credentials for the device; and

attempting to build credentials corresponding to at least one of the credential descriptors using the master credential builder.

5   12.   The method of claim 11 further including the steps of
      providing the credentials built using the master credential builder to a master credential evaluator that includes a plurality of credential evaluators for evaluating a corresponding plurality of different types of credentials
10   for the device; and
      evaluating the built credentials using the master credential evaluator to determine whether the built credentials satisfy the plurality of credential descriptors for the device.
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13.   The method of claim 11 further including the step of generating the plurality of credential descriptors for the device.

20   14.   Apparatus used to build credentials for a user of a device, comprising:
      a master credential builder for building credentials corresponding to at least one of a plurality of credential descriptors for the device, the master credential builder
25   including a plurality of credential builders each operative to build a credential of a different type for the device.

15.   The apparatus of claim 14 further including a master credential evaluator for evaluating the credentials built by
30   the master credential builder to determine whether the built

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credentials satisfy the plurality of credential descriptors for the device, the master credential evaluator including a plurality of credential evaluators operative to evaluate a corresponding plurality of different types of credentials
5 for the device.

16. The apparatus of claim 14 further including a credential descriptor generator for generating the plurality of credential descriptors for the device.
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17. A method of building credentials for a user of a device, the method comprising the steps of:
   providing a plurality of credential descriptors to a master credential builder, the master credential builder
15 including at least one credential builder;
   adding at least one different credential builder to the master credential builder to form a modified master credential builder; and
   attempting to build credentials corresponding to at
20 least one of the plurality of credential descriptors using the modified master credential builder.

18. The method of claim 17 further including the steps of
   providing the different credentials built by the
25 modified master credential builder to a master credential evaluator;
   adding different credential evaluators corresponding to at least a portion of the different credentials to the master credential evaluator to form a modified master
30 credential evaluator; and

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evaluating the credentials corresponding to at least one of the credentials using the modified master credential evaluator.

5   19.   The method of claim 18 further including the step of removing credential evaluators that do not correspond to at least one of the credentials from the master credential evaluator.

10   20.   The method of claim 17 further including the step of generating the plurality of different credential descriptors for the device.

21.   A method of building credentials for a user of a

15   device, the method comprising the steps of:

providing a plurality of credential descriptors to a master credential builder, the master credential builder including a plurality of credential builders;

removing at least one of the credential builders from

20   the master credential builder to form a modified master credential builder; and

attempting to build credentials corresponding to at least one of the credential descriptors using the modified master credential builder.

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22.   Apparatus used to build credentials for a user of a device, comprising:

a master credential builder including a plurality of credential builders operative to build credentials

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corresponding to at least one of a plurality of credential descriptors for the device; and

at least one processor operative to execute first program code to remove at least one credential builder from the master credential builder in response to a first event, and second program code to add at least one credential builder to the master credential builder in response to a second event.

23. The apparatus of claim 22 further including a master credential evaluator including a plurality of credential evaluators operative to evaluate credentials built by the master credential builder, the at least one processor being operative to execute third program code to remove at least one credential evaluator from the master credential evaluator in response to a third event, and operative to execute fourth program code to add at least one credential evaluator to the master credential evaluator in response to a fourth event.

24. The apparatus of claim 22 further including a credential descriptor generator for generating the plurality of credential descriptors for the device.

25. A method of building credentials for a user of a device, the method comprising the steps of:

providing a master credential builder having a credential builder for building a first type of credential;

in response to a predetermined event, adding an additional credential builder to the master credential

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builder for building a type of credential different from the first type of credential to form a modified master credential builder; and

attempting to build at least one credential using the
5   modified master credential builder.

26.   Apparatus used to build credentials for a user of a device, comprising:

a master credential builder having a credential builder
10   operative to build a first type of credential; and

a processor operative to execute program code to add at least one credential builder to the master credential builder in response to a predetermined event, the at least one added credential builder being operative to build a type
15   of credential different from the first type of credential.

27.   A computer program product including a computer readable medium, the computer readable medium having a credential builder computer program stored thereon, the
20   credential builder computer program being for execution in a computer and comprising:

program code for building credentials corresponding to a plurality of different credential descriptors for a device.
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28.   The computer program product of claim 27 wherein the computer readable medium further has a credential evaluator computer program stored thereon for execution in a computer, the credential evaluator computer program including program

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code for evaluating credentials corresponding to a plurality of different credentials for the device.

29. A computer data signal, the computer data signal including a computer program for use in building credentials for a device, the computer program comprising:

program code for building credentials corresponding to a plurality of different credential descriptors for the device.

30. The computer data signal of claim 29 further including a computer program for use in evaluating a plurality of different credentials for the device.

31. Apparatus used to build credentials for a user of a device connected to a network, comprising:

means for generating a plurality of credential descriptors for the device;

means for providing the credential descriptors to a first credential builder;

means for building credentials corresponding to at least one of the credential descriptors using the first credential builder;

means for providing at least one credential descriptor for which a corresponding credential was not built in the first building step to a second credential builder; and

means for building credentials corresponding to at least one of the credential descriptors provided in the second providing step using the second credential builder;

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wherein the first credential builder and the second credential builder are included in different devices connected to the network.

5   32. A method of evaluating credentials for a user of a device, comprising the steps of:

providing a plurality of credential descriptors and a plurality of credentials for the device to a master credential evaluator including a plurality of credential

10   evaluators for evaluating a corresponding plurality of different types of credentials; and

evaluating the plurality of credentials using the master credential evaluator to determine whether the plurality of credentials satisfies the plurality of

15   credential descriptors.

33. A method of evaluating credentials for a user of a device, comprising the steps of:

providing a plurality of credential descriptors and a

20   plurality of credentials for the device to a master credential evaluator including at least one credential evaluator;

adding at least one credential evaluator to the master credential evaluator to form a modified master credential

25   evaluator; and

evaluating at least one of the credentials using the modified master credential evaluator to determine whether the at least one credential satisfies at least one of the plurality of credential descriptors.

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34. A method of evaluating credentials for a user of a device, comprising the steps of:

'providing a plurality of credential descriptors and a plurality of credentials for the device to a master

5 credential evaluator including a plurality of credential evaluators;

removing at least one of the credential evaluators from the master credential evaluator to form a modified master credential evaluator; and

10 evaluating at least one of the credentials using the modified master credential evaluator to determine whether the at least one credential satisfies at least one of the plurality of credential descriptors.

15 35. A method of evaluating credentials for a user of a device, comprising the steps of:

providing a master credential evaluator having a credential evaluator for evaluating a first type of credential;

20 in response to a predetermined event, adding an additional credential evaluator for evaluating a type of credential different from the first type of credential to the master credential evaluator; and

evaluating at least one credential using the master

25 credential evaluator.

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